# COMMONWEALTH OF KENTUCKY

## BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

DUKE ENERGY KENTUCKY, INC.

ALLEGED FAILURE TO COMPLY WITH 807 KAR 5:027, SECTION 3 CASE NO. 2014-00263

# <u>ORDER</u>

Duke Energy Kentucky, Inc. ("Duke Energy"), a Kentucky corporation which engages in the distribution of gas and electricity to the public for compensation for light, heat, power, and other uses, is a utility subject to Commission jurisdiction.<sup>1</sup>

KRS 278.495 grants the Commission authority to regulate the safety of natural gas facilities owned or operated by any public utility. KRS 278.992 establishes the penalties for violations of any minimum safety standard adopted by the United States Department of Transportation pursuant to the federal pipeline safety laws.

KRS 278.030 requires every utility to furnish adequate, efficient and reasonable service. KRS 278.260 permits the Commission, upon its own motion, to investigate any act or practice of a utility that affects or is related to the service of a utility. KRS 278.280(1) further permits the Commission, after conducting such investigation and finding that a practice is unreasonable, unsafe, improper, or inadequate, to determine the reasonable, safe, proper, or adequate practice or methods to be observed and to fix same by Order.

<sup>&</sup>lt;sup>1</sup> KRS 278.010(3)(a) and (b).

Pursuant to KRS 278.280(2), which directs the Commission to prescribe rules and regulations for the performance of services by utilities, the Commission has promulgated Administrative Regulation 807 KAR 5:027, Section 3. This regulation provides, in pertinent part:

At the earliest practicable moment but no later than two (2) hours following discovery, each utility shall give notice to the commission in accordance with the subsection (3) of this section of any incident that: (a) Is reported to USDOT pursuant to 49 CFR Part 191, Federal Pipeline Safety Regulations ... (c) results in gas ignition; (d) causes estimated damage to property of the utility, or others, or both, of \$25,000 or more ... (g) Received extensive news coverage, or in the judgment of the utility is significant, even though it does not meet the criteria of paragraphs (a) though (g) of this subsection.

Commission Staff submitted to the Commission an Incident Investigation Report ("Report"), which is attached hereto as an Appendix, regarding this incident. The Report alleges that on January 25, 2013, at approximately 4:30 a.m., a house exploded at 1615 Water Works Road in Newport, Kentucky. The residence was occupied by three people. Two of the occupants were hospitalized for injuries from the explosion and resulting fire, and one of the hospitalized individuals died as a result of his injuries three days after the explosion.

At approximately 6:33 a.m. on January 25, 2013, Duke Energy Gas Control notified Jill Toncray at the Kentucky Emergency Operations Center of the explosion.<sup>2</sup> However, Duke Energy did not report the incident to Commission Staff until 11:04 a.m., approximately six and a half hours after the incident occurred and approximately four

<sup>&</sup>lt;sup>2</sup> Report at 2.

and a half hours after Duke Energy Gas Control informed the Kentucky Emergency Operations Center of the explosion.<sup>3</sup>

Based on Commission Staff's investigation of the incident as set forth in the Report and the information provided by Duke Energy in its 30-day summary report (Attachment F to the Report), the Commission finds that prima facie evidence exists that Duke Energy failed to comply with KRS 278.495 and 807 KAR 5:027, Section 3, by not providing telephonic notice of this incident to the Commission within two hours after Duke Energy's discovery of the incident. We further find that a formal investigation should be conducted to determine whether Duke Energy violated 807 KAR 5:027(3) and, if it did, whether any reason exists why penalties should not be assessed under KRS 278.992(1).

The Commission, on its own motion, HEREBY ORDERS that:

1. Duke Energy shall submit to the Commission, within 20 days of the date of this Order, a written response to the alleged violation set forth in the findings above.

2. Duke Energy shall appear on October 29, 2014, at 10:00 a.m., Eastern Daylight Time, in Hearing Room 1 of the Commission's offices at 211 Sower Blvd. in Frankfort, Kentucky, for the purpose of presenting evidence concerning the one alleged violation of 807 KAR 5:027, Section 3, and of showing cause why it should not be subject to the penalties prescribed in KRS 278.992(1) for this alleged violation.

3. The October 29, 2014 hearing shall be recorded by videotape only.

4. The Report in the Appendix is made a part of the record in this case.

<sup>з</sup> Id.

5. Any requests for an informal conference with Commission Staff shall be set forth in writing and filed with the Commission within 20 days of the date of this Order.

By the Commission



ATTEST Executive Director

Case No. 2014-00263

# APPENDIX

# APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2014-00263 DATED AUG 0 7 2014

# COMMONWEALTH OF KENTUCKY PUBLIC SERVICE COMMISSION

#### UTILITY INCIDENT REPORT

Duke Energy Kentucky, INC. Newport, Kentucky Incident Date: January 25, 2013

Report Number: Duke Energy Kentucky, INC. 012513

#### BRIEF

 PSC Inspectors:
 Joel Grugin, Utility Regulatory and Safety Investigator III

 Bill Aitken, Utility Regulatory and Safety Investigator IV

 Steve Samples, Utility Regulatory and Safety investigator III

<u>Name of Utility:</u> Duke Energy Kentucky, INC. (Duke Energy)

**Type of Facility:** Private Distribution & Transmission

Type of inspection: Incident Investigation

Inspection Purpose: Incident investigation due to a release, ignition, and explosion involving natural gas. As a result of this incident 2 of the 3 occupants in the house at the time were injured requiring hospitalization. The most severely injured died from his injuries January 28, 2013. The other occupant was released from the hospital a few days later.

Date and Time of Incident: January 25, 2013 at approximately 4:30 AM

<u>Weather Conditions:</u> Overcast, 21 Degrees F. Wind speed 10 MPH (This information was contained in the National Response Center document)

Location of Incident: 1615 Water Works Road, Newport Kentucky (Campbell County)

Applicable Regulations and Statutes: 49 CFR Part 191, 192, & 199 and 807 KAR 5:006, 5:022, & 5:027

#### UTILITY INFORMATION

**Description of Utility:** Private Distribution and Transmission Operator

Number of Customers: Approximately 94,909

<u>Area of Operation:</u> Northern Kentucky Counties of Boone, Campbell, Gallatin, Grant, Kenton and Pendleton.

#### **NOTIFICATION**

On January 25, 2013 at approximately 6:33 AM Duke Energy gas control notified Jill Toncray at the Kentucky Emergency Operations Center to report an explosion at 1615 Water Works Road in the city of Newport in Campbell County.

On January 25, 2013 at 11:04 AM Mr. Randy Suttles, Regulatory and Compliance Specialist, with Duke Energy, notified Joel Grugin of the Kentucky PSC by phone of the incident at 1615 Water Works road. PSC investigators Joel Grugin and Bill Aitken left shortly thereafter and arrived at the incident site at 1:30 PM.

# TIME LINE OF INVESTIGATION AND INTERVIEWS

#### January 25, 2013 1:30 PM

Upon arrival at the incident site, the structure at 1615 Water Works Road was found completely destroyed. From the debris field it was obvious that an explosion had occurred and a fire had consumed portions of the debris. The fire was out and Randy Suttles with Duke Energy advised that the natural gas supply had been turned off at the curb valve by the first responding Duke Energy employee to the scene.

A pre-investigation meeting was called by officer Marty Hart with the Campbell County Police Arson Department in the street in front of 1615 water Works Road. He informed us and all the other different entities present that his department had jurisdictional control and was in charge of the investigation at this time to rule out the possibility of any criminal activity involved into the cause of this incident. He also stated that all possible evidence removed from the incident scene would be held by his department. If a criminal act was found not to be involved, then a formal civil investigation could be conducted.

Present at this time were representatives from Duke Energy, Campbell County Police, ATF, Newport Fire, Kentucky Public Service Commission (KPSC) investigators, the Neal family representatives and investigators obtained by the various insurance companies and other entities that may have a legal standing in this incident such as appliance manufacturers or contractors who had previously performed work on the property.

The meter set assembly from the outlet of the meter valve to the outlet of the meter had already been removed and the meter valve was plugged. Duke Energy employees had performed this under the direction of officer Marty Hart. It was agreed to by all the parties involved that the first step taken should be to test the service line.

At approximately 2:10 PM a Duke Energy crew cut the service line just past the curb valve at the street and started a pressure test from that point to the meter set that was plugged off, it would not hold test. Then it was decided that the service line would be exposed at the transition point near the building foundation where the service line went from plastic to the steel riser. The service line would be cut and capped and another test would be applied. At the meter set approximately a 3 foot by 3 foot concrete pad had to be broken to be able to expose the riser. All of the work was being performed by hand by Duke Energy employees. When most of the soil was removed from the riser and just as it was being exposed, the riser with the transition coupling attached slid off the plastic portion of the service line. This revealed the transition coupling which would be an area of concern for further testing for the root cause. It did not appear to me that any undue force was used by the workers to cause the coupling to come off. At that point the plastic service line was cut just prior to the gripping area of the transition coupling and a compression cap installed. Another test was applied to the plastic portion of the line and it held. It was obvious that the first test leakage was between the gripping area of the transition fitting and the plugged end of meter valve.

It could not be determined at that time if the service line coupling was leaking prior to the explosion or if the leak had occurred because of the force of the explosion.

See Attachment's A, B, and C

#### January 28, 2013 11:00 AM

Information was gathered from Officer Mart Hart by phone that Dwayne Lattrell (DOB 4/2/1979) had died as a result of the injuries he sustained on 1/25/2013. His mother Ida Neal was still in the hospital and her injuries appeared to not be life threatening. Contact information was requested from him for the Newport Fire Department so they could be contacted for a copy of their run report. The run report was received by email 1/28/2013

#### January 28, 2013 2:43 PM

(Information request #1) An email request was sent to Randy Suttles of Duke Energy for information I would need to continue my investigation into the incident. There were 16 items requested.

See Attachment D

#### January 29, 2013 8:30 AM

KPSC investigators went to1262 Cox Road in Erlanger, Kentucky to receive and discuss the information that was requested 1/28/2013 from Duke Energy, the representatives present were Randy Suttles, James Mclean, Rocco D'Asceazo, John Wical, Dennis Westenburg and Jerome Humphries.

#### January 31, 2013

(Information Request #2) was sent to Duke Energy and10 items were requested.

See Attachment D

#### February 4, 2013

A phone call and e-mail was received from Al Sabatino of Zeehandelar, Sabatino & Associates, LLC. advising that he had been retained by Metropolitan Property and Casualty company who has the insurance coverage on the house at 1615 Water Works Road. Contact information was exchanged and the plan for analyzing the incident scene was briefly discussed. Scientific Expert Analysis ("SEA") would be the professional investigators hired by MET Life Insurance Company to handle the incident investigation.

#### See Attachment E

#### February 5, 2013 approximately 8:35 AM

KPSC investigators went to 1262 Cox road in Erlanger Kentucky and interviewed Nate White, the Duke Energy first responder, who got the call and was first on scene 1/25/2013 at 1615 Water Works road. Duke Energy representatives present were Dennis Westenberg, James Mcklean, John Klette, Nate White, Randy Suttles and Jerome Humphries. From that interview and records that had been provided it was determined that Nate White responded properly and followed all of the applicable policy and procedures for an incident such as this. Nate White was also administered a drug test immediately after the incident 1/25/2013 and all results were negative.

#### February 5, 2013 approximately 12:10 PM

KPSC investigators interviewed Captain Patrick Krogman at the Newport Fire Station located at 998 Monmouth in Newport Kentucky. He stated that when they arrived on scene it was not apparent that natural gas was feeding the fire. After the outer edges of the debris were extinguished, it was discovered that gas was burning in the vicinity of the meter set assembly. When Duke Energy employee Nate White turned off the curb valve, the fire in that area decreased in size and the debris around it was able to be extinguished. Two other firemen that were present during the incident fire were at the interview, they were LT. Richard Klaserner and LT. Matthew Pleiman.

#### February 8, 2013

(Information Request # 3 & 4) sent to Duke Energy.

See Attachment D

#### February 11, 2013

(Information Request #5) sent to Duke Energy.

See Attachment D

#### February 14, 2013

Received information responses 4 and 5 from Duke Energy

See Attachment D

#### February 15, 2013

Received Information request 3 from Duke Energy

See Attachment D

#### February 18, 2013

Received Duke Energy's 30 day summary report.

See Attachment F

### March 20, 2013

Received an email from AI Sabatino concerning testing of the riser assembly and transfer of custody to Daryl Reynolds of Mid-West Forensics whom was retained by SEA to perform the non-destructive CT scan.

#### See Attachment E

### April 3, 2013 10:00 AM

KPSC investigators traveled to 732 Scott Street in Covington, Kentucky to the law office of Gailen W. Bridges to interview Paul and Ida Neal. Also present was officer Marty Hart and Gailen Bridges, the Neal's attorney. During this interview it was learned that when the incident occurred Ida Neal was asleep on the second floor in the front of the house and her son, Dwayne Lattrell was asleep on the second floor in the rear of the house. Paul Neal was in the kitchen preparing to leave for work. Paul and Ida both stated that they had not smelled any odor of natural gas prior to the incident. Both also stated that they knew what the odor in natural gas smelled like. The Neal's had bought the house in March of 1989 and that there had been no service work performed to the appliances or to the house recently. When inquiring where they thought the explosion might have occurred, Paul answered from above and Ida said she had no idea since she was asleep at the time but stated that most of the flames were in the center of the house after the explosion.

#### April 23, 2013

An on scene investigation was conducted of the gas appliances and pressure testing of the house line piping. The KPSC gas branch staff made the decision not to attend this part of the investigation due to the fact that professional investigators were performing the investigation and the results from this part of the investigation could also be obtained.

#### July 1, 2013

KPSC received information from Duke Energy about the testing performed on April 23, 2013 in an email update. The information contained in that email revealed that there were several leaks found on the house line piping.

See Attachment G

#### July 23, 2013

Received email from Al Sabatino regarding plans to cut the riser so that it may fit into the CT scanner.

÷,

See Attachment E

#### September 25, 2013

Received images from Duke Energy of the CT scan performed on the service line coupling. This information was labeled as confidential.

#### January 8, 2014

Received notification from Duke Energy that they had submitted the final report to PHMSA concerning the 1615 Water Works Road incident.

See Attachment H

#### January 28, 2014

Received Final Accident Report from Duke Energy.

See Attachment I

# **FINDINGS**

No violations were discovered of any of the applicable regulations governing Duke Energy as a result of the investigation into this incident. It is this investigators opinion that the cause of this incident could remain unknown.

#### **RECOMMENDATIONS**

Duke Energy shall try to obtain custody of the customer owned riser assembly in order to perform its own analysis as required in Federal Code 49 CFR 192.617. Duke shall notify the KPSC of the results of any further analysis conducted.

If more information is received from Duke Energy concerning this incident in the future, the KPSC will evaluate it at that time to see if further action is warranted.

Investigated By	Name:	Company:
	Joel Grugin Utility Regulatory and Safety Investigator III	KPSC
Signed:(	Apel Imagin	
Date:	6/2/14	

Attachments:

Investigated Rv

- A. KPSC Photographs of Incident Site
- B. Duke Energy Photographs of Incident Site
- C. Google Maps Photographs of Incident Site (Before and After Incident)

- D. Duke Energy Information Requests from KPSC
- E. E-mails and Photograph from Al Sabatino
- F. Duke Energy 30 Day Summary Report
- G. Email and Photographs from Duke Energy describing the events of the on-scene investigation of non-jurisdictional house piping and appliances
- H. Duke Energy Report to PHMSA (Form 7100.1)
- I. Duke Energy Final Accident Report

Attachment A

**KPSC** Photographs of Incident site





Attachment B

Duke Energy Photographs of Incident Site








































Attachment C

Google Maps Photographs of Incident Site (Before and After Incident)

Google





To see all the details that are visible on the screen, use the "Print" link next to the map.



# Google

Attachment D

**Duke Energy Information Requests from KSPC** 

There were 5 separate requests made to Duke Energy for information

pertaining to the investigation of this incident. The questions were as

follows.

First Set of Questions Received on January 28, 2013

1. Leak surveys performed in this area within the last 5 years (Yes. Copies of surveys with Map S01-E01)

2. Pressure records for the distribution system supplying the system for the last 12 months. (We have this spreadsheet with 10,000 data points. Waiting on Hofferfor 12 month continuous graph. Hoffer to supply alarm data)

3. MACP of the supply system. If it is a 35 # system. We have test records from December 10, 1997 for the service at 1615 Waterworks Road. The service was tested at 904 for 10 minutes. We also have the main installation test record from September 27, 1968 for thel2" SWPC that was tested at 100# for 72 hours)

4. Has the supply system ever been uprated to a higher operating pressure? (No)

5. A timeline of all calls received related to this incident the day it occurred. (Created)

6. Names of the responding Duke Energy personnel to the scene. (Created)

7. Arrival times and actions taken of responding personnel. (Created)

8. Did Duke Energy own the service line at 1615 waterworks road? (No)

9. Any records pertaining to the installation of the service line. By whom ? Company or plumbers? Material used? Etc... (Renewed by Duke-Energy on March 19, 1976; originally installed steel service in 1930)

10. If a third party installed the service line are there records of who inspected (open ditch inspection?) (Pressure tested?) (Renewed by Duke-Energy on March 19, 1976) 11. Identifying / specification numbers off of the service line piping. (Pipe did not have any markings)

12. Since there was a steel coupling on the plastic service line with no anode present, was the service line in question on Duke Energy's isolated service list? (No)

13. Had any repairs ever been made on the service line since it was installed? (We have copies of 3)

14. A list of all service/leak and odor investigations at this address. (No leak activity for the last 18 months. It takes 24 hrs. to view archive information. Meter was age-changed on Oct. 15, 2005)

15. Odor readings from this system 6 months prior to and including the day of the incident. Also locations where they were taken. (We have copies of last 6 months) 16. Who owns the property at 1615 waterworks road? (Paul & Ida Neal)

# Answers to Second Set of Questions, Received on January 31, 2013

17. For the last 30 days the highest daily recorded operating system pressure supplying 1615 waterworks road. (Provided)

18. All OQ records for Brian Crisler, Nate White, Jim Hornsby, Rob Cooper, Eric Leedy, Jerry Harris and Stave Black. (Provided)

19. Public Awareness notification records for the incident site and approximately a 1000 foot radius around it for both gas and non-gas (if any?) Residents. Dates communicated and copies of message. (Provided)

20. A copy of all pictures taken by Duke Energy employees of the incident site 1/25/2013. (Provided)

21. A copy of Duke Energy's most up to date operation & maintenance and emergency plans. (Provided)

22. Script of all calls from Campbell fire dispatch (911) concerning this incident on 1-25-2013. (Recordings available; Duke-Energy's Call Center script provided)

# Duke-Energy's response to the KPSC's #3 request for information

Jerome I am requesting the following for 1615 waterworks road.

1. Pipe joining procedures for mechanical couplings that would have been in place at the time of the service line installation in 1976.

The Duke-Energy policy in place in 1976 was to install mechanical fittings according to manufacturer instructions. Please refer to 192.283 (Amendment 192-34 effective January 1, 1980). I have attached our current procedure GD60.780.

2. All training records of the crew that installed the service line in 1976. (the records show W. King and J. Chapman on what I have)

Wayne King retired on 12/31/1996. James Chapman retired on 11/01/1992. According to our internal record retention policy, we retain records for active employees plus five years. The training records for these employees have been discarded. This policy mirrors the current OQ record retention requirement. Please refer to 192.807(b).

# Duke-Energy's response to the KPSC's #4 request for information

Jerome, I am requesting

1. Results of the leak surveys performed 1-25-2013

(Provided)

2. Names and training records for those employees performing the leak surveys 1-25-2013

(Steve Black and Rob Cooper-OQ records already provided (response 18 inbook) to the KPSC)

3. Calibration records of the leak survey equipment used 1-25-2013 (Provided)

# Duke-Energy's response to the KPSC's #5 request for information

Jerome, I have determined that there are a few more questions that I need answered from Nate White and Duke Energy.

1. Duke energy's plan for emergencies in chapter 4.3 (b) (1), (c)f3) and 4.4 (b)(1) calls for using a CGI. To make tests.

In making these tests is a bar hole required to perform this? No. lithe person performing a CGI test receives an indication of gas leaking, he is then required to perform further tests which would include probe holes and/or bar holes under our Pinpointing Gas Leaks and Leak Classification procedure GD60.736.

2. Icould notfind a definition of a CGI, test in the documents that I have been given. Maybe lover looked it

So, describe the procedure for making a Duke energy CGI. Test. A Combustible Gas Indicator (CGI) is a general industry term that Duke-Energy utilizes in our procedures. Duke-Energy uses various

CGI's such as Remote Methane Leak Detectors (RMLD), Southern Cross Flame bnization Units (FI's), Sensit Gold CGI's and MSA Model 60. CGI's. The following information is taken from our Leak Survey procedure GD5S.1304-

1, page 9:

1. For Designated Building and when a suspected leak is reported to the Company, Service Delivery

OH/KY personnel will check the inside of the front of the building's exterior wall(s) adjacent to buried natural gas mains and services. Watch for crawl spaces and false walls while checking the following locations with the CGI:

a. All cracks or holes in the exterior walls.

B. In and around all conduits, such as data, telephone, electric and cable television service entrances.

C. Around water services and other lines coming through the walls, such as sewers and sprinkler systems.

U. Floor drains.

e. High areas where gas might enter or collect, such as along the intersection of foundation walls and ceilings/floors.

3. Did Nate White perform any bar hole or sub surface tests using a device to penetrate the ground to make a hole and then insert a probe from a CGI to take a reading? No.

4. If he did, what were the results of those tests? N/A

5. If Nate White did not perform any CGI. Tests. (Below grade tests) Did superiors in Duke Energy instruct him not?

to do so? No. Nate White did perform below grade tests. Please refer to our response to question 2.

6. If yes, Who instructed him to do so? N/A.

7. If yes, Can the person explain why that decision was made? N/A

8. Does Duke Energy affirm that Nate Whitefollowed the plan for responding to emergencies as described in chapter 4? Yes. We also would like to state that all of our responding personnel (Nate White – First Responder,

RobCooperand Steve Back—LeakSurveyors, Mark Davis—Field Supervisor and Jim Hornsby-Gas Controller) followed our Plans for Emergencies and Natural Disasters.

Attachment E

E-mails and Photograph from Al Sabatino

From:	Al Sabatino <asabatino@zsa-law.com></asabatino@zsa-law.com>
Sent:	Monday, February 04, 2013 11:15 AM
То:	Grugin, Joel W (PSC)
Subject:	RE: 1/25/2013 Duke energy explosion at 1615 Water works rd. Newport, KY

Joel,

Good talking to you earlier. Here is all of my info. I will keep you in the loop on anything we intend to do in this case. As I indicated, I will be coordinating with Duke to get out to the scene to attempt to ID the gas appliances. Once I get a date from Duke, I will let you know – thanks, AI

Al Sabatino Zeehandelar, Sabatino & Associates, LLC 471 East Broad Street, Suite 1500 Columbus, Ohio 43215 Phone: 614-458-1200 Fax: 614-458-1201

From: Grugin, Joel W (PSC) [mailto:JoelW.Grugin@ky.gov]
Sent: Monday, February 04, 2013 10:51 AM
To: asabatino@zsa-law.com
Cc: Brangers, Jason (PSC); Aitken, Bill (PSC); Samples, Steven D (PSC)
Subject: 1/25/2013 Duke energy explosion at 1615 Water works rd. Newport, KY

I was given your name by Marty Hart with the Campbell county Kentucky police department. I understand that you are handling the investigation

for the home owners insurance company of the above mentioned incident. I would like to speak with you at your earliest convenience about the procedures and timeline you intend to follow in your investigation. I am conducting an investigation of any possible Federal or state pipeline safety violations in this case. Regards, Joel

Joel W. Grugin Investigator Kentucky Public Service Commission Gas Pipeline Safety Branch 211 Sower Boulevard P.O. Box 615 Frankfort, Kentucky 40602 Phone: (502) 782-2602 Fax: (502) 564-1582 Cell: (502) 545-2141

From:	Al Sabatino <asabatino@zsa-law.com></asabatino@zsa-law.com>
Sent:	Wednesday, March 20, 2013 3:02 PM
То:	James McLean; Marty Hart; Grugin, Joel W (PSC); 'Mulcahy, Mark J.';
	gailenbridges@yahoo.com; 'Frederick F. Franklin, P.E.'; Jason Palmer; Mark Hagen (Mark
	Hagen)
Cc:	fphackett@midwestforensics.com;
Subject:	CT scanning of evidence from residence of Paul and Ida Neal - explosion of 1/25/13

#### Colleagues,

Regarding the explosion that took place at the residence of Paul and Ida Neal on 1/25/13, we are going to move forward with performing a <u>non-destructive</u> CT scan on the riser and the customer service line that is currently in the custody of the Campbell County Police Department. The testing will be performed by Mid-West Forensic Services. The testing will be performed at 4340 W. 96<sup>th</sup> Street, Suite 102, Indianapolis, Indiana. The point of contact for the testing is Fred Hackett. The phone number is 877-760-8789.

The plan is to have an investigator from Mid-West Forensics, Daryl Reynolds, who will be traveling through the area tomorrow (March 21, 2013 between 8:30am and 9:00am), take custody of the aforementioned evidence with an appropriate chain of custody form, and bring the evidence back to Mid-West Forensics. The testing will be performed within a week or so of the delivery of the evidence. I will ask Mid-West Forensics to thereafter preserve the evidence until further notice.

All the photographs and CT images that are created by Mid-West Forensics will be produced to all interested parties.

If you have any questions, please call me at the below number. However, I will be out of the office until Monday, so please feel free to use my cell which is 614-313-4351.

Al Sabatino Zeehandelar, Sabatino & Associates, LLC 471 East Broad Street, Suite 1500 Columbus, Ohio 43215 Phone: 614-458-1200 Fax: 614-458-1201

From: Sent: To:	Al Sabatino <asabatino@zsa-law.com> Tuesday, July 23, 2013 12:26 PM Andrew.Lukensmeyer@emerson.com; Ashley Brown; Barry Rudell; bcanova@oneilllassociates.biz; Bill Johnson; Brian Mohs; Chuck Losi; coryreeves@originfirst.com; David Jansing; Deborah Hilton; doug_ruth@efiglobal.com;</asabatino@zsa-law.com>
	Gailen Bridges; George Yarzak; Grugin, Joel W (PSC); info@metroadjusting.com; James McLean; Jason Palmer; jay@AEIengineers.com; jerryw@safetyengineeringlabs.com; jgibson@lightfootlaw.com; John Moore; Jonathan McClain; jpemerton@lochinvar.com; jtate@stites.com; Karen Vencus; kerry_autio@efiglobal.com; Mark Mulcahy; Marty Hart; Michael Hostetter; Michael Mills; n.camara@mcdowellowens.com; Pamela Lindman; paul.jackey@carrier.utc.com; Rick Franklin; rjordan@donan.com; Scott Jones; scotts@CraneEngineering.com; Silvia Herrera; Steve Erlenbach; Todd@SchaeferEng.com; vthompson@hotwater.com
Cc:	Elizabeth Buc
Subject:	CT Scanning of evidence - Paul and Ida Neal explosion of 1/25/13 at 1615 Waterworks Road, Newport, Kentucky
Attachments:	Photo showing pipe and where to cutJPG

#### Colleagues,

Now that the scene exam is complete, we are going to proceed with performing a CT scan of the piping assembly (photo attached) and customer service line. <u>However, the piping is too large to fit into the scanner, and, therefore, it will need</u> <u>to be cut.</u> We plan on using a Ridgid 4-wheel cutter like we used at the scene to make cuts when necessary. This would require the removal of some of the existing tape. The cutting will take place at:

SEA, Ltd. 7349 Worthington Galena Road Columbus, Ohio 43085 Phone: 614-888-4160

Our proposed protocol for cutting the piping is fairly simple:

1) Secure the piping assembly.

2) Draw a match line at the steel pipe / compression fitting connection (to show that It has not moved as a result of the cutting).

3) Cut the pipe at the red line on the photo.

4) Photograph and videotape the process.

Once the cutting is complete, we will send the evidence to:

Elizabeth C Buc, PhD, PE, CFI Materials Engineer /Fire Investigator FIRE AND MATERIALS RESEARCH LAB, LLC 33025 Industrial Road, Livonia, MI 48150-1619

Dr. Buc will oversee the CT Scanning, which will take place at:



Attachment F

Duke Energy 30 Day Summary Report

<u>PIPELINE SAFETY BRANCH INCIDENT REPORT FORM</u> KENTUCKY PUBLIC SERVICE COMMISSION		
(502) 564-3940		
Date of Call 01/25/2013 Time of Call 06:33 AM X PM ET CT		
Caller: Name: James Hornsby Title: Gas Controller		
Phone: (513) 287-2559 Address: 139 E. Fourth St Cinti Ohio 45202		
Company Involved: Duke-Energy OPID: # 20110		
Date of Incident; 01/ 25/ 2013 Time of Incident 05:23 AM X PM ET CT		
Location of Incident: County: Campbell City: Newport		
Address: 1615 Water Works Road		
Did Incident Cause: Fatality? Yes X No Number? 1 Injury? Yes X No Number? 2		
Names of Injured or Fatalities: Fatality – Dwayne Luttrell; Injured – Ida Neal and Paul Neal		
Estimated Cost of Damages: (Include gas loss and structural loss.) Gas \$142.00 Structural \$79,200.00 Did the following occur: A. Explosion X B. Blowing Gas X C. Fire X D. Evacuation Description & Possible Cause of Incident: Under Investigation		
Number of Customers Out of Service # 1 Date & Time Service Restored/ Left off		
Corrective Actions Taken: Performed leak surveys day of incident; checked for leak/odor calls during the past 90 days in a 1000' radius; performed an Odorometer test; abandoned the service curb to meter; verified that the past two leak surveys had been performed; verified that the MAOP had not been exceeded; verified the curb box accessibility; working with KPSC with an ongoing investigation into the cause		
Incident reportable under 807 KAR 5:027? Yes X No Regulation application: Kentucky X Federal X		
Under what criteria is this incident reportable? DOT reportable; fatality, injury requiring hospitalization, gas ignition; media coverage; property damage greater than \$25,000		
is Follow-up Action Required by Company? Yes X No		
Cause Code: Corrosion 3 <sup>RD</sup> Party Damage Construction Other Suicide X Undetermined		
signature <u>om ny la stenden</u> TITLE <u>Manager Gae Regulaton</u> DATE <u>2/18/2013</u> (essupliance		

Attachment G

E-mailand Photographs from Duke Energy describing the events of the on-scene investigation of non-jurisdictional house piping and appliances

From: Sent: To: Cc: Subject: Attachments: Suttles, Randall L <Randall.Suttles@duke-energy.com> Monday, July 01, 2013 11:15 AM Grugin, Joel W (PSC) Brangers, Jason (PSC) KPSC update letter.docx KPSC update letter.docx

#### Updated Information:

On June 18, 2013 at approximately 3:24 PM, I was contacted by Joel Grugin of the Kentucky Public Service Commission. Mr. Grugin was requesting an update for the incident that occurred on January 25, 2013, at 1615 Water Works Road in Newport Kentucky.

On April 23, 2013 Duke Energy personnel participated in the ongoing investigation at the scene of 1615 Water Works Road. This portion of the Investigation was led by Scientific Expert Analysis (S-E-A) representing Met Life Insurance Company. I have attached the sign in sheet that was captured on the day of the investigation. The purpose for this part of the investigation was focused on the natural gas appliances, the customer owned house piping, and the customer owned service line. The investigation started by taking several photos of the gas appliances. Once the appliances had been photographed, they were removed and packaged for transportation to S-E-A headquarters. Next, the investigation focused on the customer owned house piping. The investigation revealed multiple unions in the house line. The next step was to pressure test the house piping in place once the appliance lines had been capped. This test failed. I have attached several photos of the testing. As you can see, there were leaks at the unions. SEA representatives then removed the house line using the same protocols as the appliances. Next they had our company crew's dig up the service at the curb to see the previous repair that occurred in 19xx. The last portion of the investigation focused on the customer owned service line. The investigators were looking for markings on the pipe. None were discovered, however they removed a section of the service to take with them for further analysis.

At this time, Duke Energy is not aware of any scheduled testing on any of the material removed. Our legal department has been in contact with Met Life and SEA and we will notify you of any additional testing.

Thank you,

Randy Suttles Regulatory Compliance Specialist, Third Party Claims Duke Energy-Gas Operations O-513-287-3346 C-513-312-8550











Attachment H

Duke Energy Report to PHMSA (Form 7100.1)

NOTICE: This report is required by 49 CFR Part 191. Failure to report can result in a civil p 100,000 for each violation for each day that such violation persists except that the maximur exceed \$1,000,000 as provided in 49 USC 60122.		OMB NO: 2137-0522 EXPIRATION DATE: 02/28/20	)14
2	Original Report Date:	02/18/201	3
U.S Department of Transportation	No.	20130018- 1	5778
Pipeline and Hazardous Materials Safety Administration		(DOT Use On	
INCIDENT REPORT - GAS SYSTEM	DISTRIBUTION		
A federal agency may not conduct or sponsor, and a person is not required to respond to, n collection of information subject to the requirements of the Paperwork Reduction Act unless The OMB Control Number for this information collection is 2137-0522. Public reporting for response, including the time for reviewing instructions, gathering the data needed, and com collection of information are mandatory. Send comments regarding this burden estimate or reducing this burden to: information Collection Clearance Officer. PHMSA, Office of Pipelin	that collection of informat this collection of informat pleting and reviewing the any other espect of this	ation displays a current valid OM ion is estimated to be approxima a collection of information. All re collection of information, includir	B Control Number. Itely 10 hours per sponses to this to suggestions for
INSTRUCTIONS	······		
Important: Please read the separate instructions for completing this form before you begin you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Su	i. They clarify the information of the information of the second se	allon requested and provide spe ge at <u>http://www.phmsa.dol.gov</u>	cific examples. If /pipeline.
PART A - KEY REPORT INFORMATION			
Report Type: (select all that apply)	Original:	Supplementai: Yes	Final: Yes
Last Revision Date	01/08/2014		
1. Operator's OPS-issued Operator Identification Number (OPID):	20110		
2. Name of Operator	DUKE ENERGY K	ENTUCKY	
3. Address of Operator: 3a. Street Address		H STREET, RM 460-A PO E	lox 960 - Room
3b. City	460-Annex CINCINNATI		·····
3c. State	Ohio		
3d. Zip Code	45202		
4. Local time (24-hr clock) and date of the Incident:	01/25/2013 04:39		
5: Location of Incident:			
5a. Street Address or location description	1615 Water Works	Road	
5b. City 5c. County or Parish	Newport Campbell		
5d. State:	Kentucky		
Se. Zip Code:	41071	· · · · · · · · · · · · · · · · · · ·	
5f. Latitude:	39.091901		
Longitude:	-84.462267		
6. National Response Center Report Number:     7. Local time (24-hr clock) and date of initial telephonic report to the National	1036545		
Response Center: 8. Incident resulted from:	01/25/2013 06:33		
9. Gas released:	Unintentional relea Natural Gas	se ol gas	
- Other Gas Released Name:	Natural Gas		
10. Estimated volume of gas released - Thousand Cubic Feet (MCF):	35.00		······
11. Were there fatalities?	Yes		
- If Yes, specify the number in each category:			
11a. Operator employees	0		
11b. Contractor employees working for the Operator 11c. Non-Operator emergency responders	0		
11d. Workers working on the right-of-way, but NOT	0		······································
associated with this Operator			
11e. General public	1		
11f. Total fatalities (sum of above)	1		
<ol> <li>Here there injuries requiring inpatient hospitalization?</li> <li>If Yes, specify the number in each category:</li> </ol>	Yes		
12a, Operator employees	0		·····
12b. Contractor employees working for the Operator	0		
12c. Non-Operator emergency responders	0		
12d. Workers working on the right-of-way, but NOT associated with this Operator	0		
12e. General public	1		
12f. Total injuries (sum of above)	1		
13. Was the pipeline/facility shut down due to the incident?	Yes		

Page 1 of 10

- If No, Explain:	
<ul> <li>If Yes, complete Questions 13a and 13b: (use local time, 24-hr clock)</li> <li>13a. Local time and date of shutdown:</li> </ul>	01/25/2013 06:15
13b. Local time pipeline/facility restarted:	01/23/2013 00.13
- Still shut down? (* Supplemental Report Required)	Yes
14. Did the gas ignite?	Yes
15. Did the gas explode?	Yes
16. Number of general public evacuated:	0
17. Time sequence (use local time, 24-hour clock):	
17a. Local time operator Identified Incident:	01/25/2013 05:09
17b. Local time operator resources arrived on site:	01/25/2013 05:09
PART B - ADDITIONAL LOCATION INFORMATION	
1. Was the Incident on Federal land?	No
2. Location of Incident	Private property
3. Area of Incident:	Aboveground
Specify	
If Other, Describe	
4. Did incident occur in a crossing?	
- If Yes, specify type below:	No
- If Bridge crossing ~	
- Ir Bridge crossing Cased/ Uncased:	
- if Railroad crossing -	
Cased/ Uncased/ Bored/drilled	
- If Road crossing -	
Cased/ Uncased/ Bored/drilled	
- If Water crossing -	
Cased/ Uncased	
Name of body of water (If commonly known)	
Approx. water depth (ft)	
PART C - ADDITIONAL FACILITY INFORMATION	
1. Indicate the type of pipeline system:	
	Natural Gas Distribution, privately owned
- If Other, specify	
2. Part of system involved in Incident:	Outside Meter/Regulator set
2. Part of system involved in Incident: - If Other, specify	Outside Meter/Regulator set
<ol> <li>Part of system involved in Incident:         <ul> <li>If Other, specify</li> <li>2a. Year "Part of system involved in Incident" was installed:</li> </ul> </li> </ol>	Outside Meter/Regulator set
<ol> <li>Part of system involved in Incident:         <ul> <li>If Other, specify:</li> <li>Year "Part of system involved in Incident" was installed:</li> <li>Unknown?</li> </ul> </li> </ol>	Outside Meter/Regulator set
<ol> <li>Part of system involved in Incident:         <ul> <li>If Other, specify</li> <li>2a. Year "Part of system involved in Incident" was installed:</li></ul></li></ol>	Outside Meter/Regulator set
2. Part of system involved in Incident:	Outside Meter/Regulator set
<ol> <li>Part of system involved in Incident:         <ul> <li>If Other, specify:</li> <li>Year "Part of system involved in Incident" was installed:</li></ul></li></ol>	Outside Meter/Regulator set 2005 ent" (from PART C, Question 2), provide the following:
2. Part of system involved in Incident:	Outside Meter/Regulator set 2005 ent" (from PART C, Question 2), provide the following:
2. Part of system involved in Incident:	Outside Meter/Regulator set 2005 ent" (from PART C, Question 2), provide the following:
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2. Part of system involved in Incident:	Outside Meter/Regulator set
2. Part of system involved in Incident: - If Other, specify. 2a. Year "Part of system involved in Incident" was installed: Unknown? 3. When "Main" or "Service" is selected as the "Part of system involved in Incid 3a. Nominal diameter of pipe (in): 3b. Pipe specification (e.g., API 5L, ASTM D2513): Unknown? 3c. Pipe manufacture: Unknown? 3d. Year of manufacture: Unknown? 4. Material involved in Incident: - If Other, specify: 4a. If Steel, Specify searn type: None/Unknown? 4b. If Steel, Specify wall thickness (inches): Unknown?	Outside Meter/Regulator set
2. Part of system involved in Incident:	Outside Meter/Regulator set
2. Part of system involved in Incident: - If Other, specify 2a. Year "Part of system involved in Incident" was installed: Unknown? 3. When "Main" or "Service" is selected as the "Part of system involved in Incid 3a. Nominal diameter of pipe (in): 3b. Pipe specification (e.g., API 5L, ASTM D2513): Unknown? 3c. Pipe manufacturer: Unknown? 3d. Year of manufacture: Unknown? 4. Material involved in Incident: - If Other, specify: 4a. If Steel, Specify seam type: None/Unknown? 4b. If Steel, Specify wall thickness (inches): Unknown? 4c. If Piastic, Specify type: - If Other, describe:	Outside Meter/Regulator set
2. Part of system involved in Incident:	Outside Meter/Regulator set
2. Part of system involved in Incident: - If Other, specify 2a. Year "Part of system involved in Incident" was installed: Unknown? 3. When "Main" or "Service" is selected as the "Part of system involved in Incid 3a. Nominal diameter of pipe (in): 3b. Pipe specification (e.g., API 5L, ASTM D2513): Unknown? 3c. Pipe manufacturer: Unknown? 3d. Year of manufacture: Unknown? 4. Material involved in Incident: - If Other, specify: 4a. If Steel, Specify seam type: None/Unknown? 4b. If Steel, Specify wall thickness (inches): Unknown? 4c. If Piastic, Specify type: - If Other, describe:	Outside Meter/Regulator set
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2. Part of system involved in Incident: - If Other, specify 2a. Year "Part of system involved in Incident" was installed: Unknown? 3. When "Main" or "Service" is selected as the "Part of system involved in Incid 3a. Nominal diameter of pipe (in): 3b. Pipe specification (e.g., API 5L, ASTM D2513): Unknown? 3c. Pipe manufacturer: Unknown? 3d. Year of manufacture: Unknown? 4. Material involved in Incident: - If Other, specify: 4a. If Steel, Specify searn type: None/Unknown? 4b. If Steel, Specify wall thickness (inches): Unknown? 4c. If Piastic, Specify type: - If Other, describe: 4d. If Piastic, Specify Standard Dimension Ratio (SDR): Or wall thickness:	Outside Meter/Regulator set
2. Part of system involved in Incident: - If Other, specify. 2a. Year "Part of system involved in Incident" was installed: Unknown? 3. When "Main" or "Service" is selected as the "Part of system involved in Incid 3a. Nominal diameter of pipe (in): 3b. Pipe specification (e.g., API 5L, ASTM D2513): Unknown? 3c. Pipe manufacturer: Unknown? 3d. Year of manufacture: Unknown? 4. Material involved in Incident: - If Other, specify: 4a. If Steel, Specify searn type: Vone/Unknown? 4b. If Steel, Specify wall thickness (inches): Unknown? 4c. If Piastic, Specify Standard Dimension Ratio (SDR): - If Other, describe: Unknown? 4e. If Polyethylene (PE) is selected as the type of plastic in Part C, Q - Specify PE Pipe Material Designation Code (i.e. 2406, 3408,	Outside Meter/Regulator set
2. Part of system involved in Incident: - If Other, specify 2a. Year "Part of system involved in Incident" was installed: Unknown? 3. When "Main" or "Service" is selected as the "Part of system involved in Incid 3a. Nominal diameter of pipe (in): 3b. Pipe specification (e.g., API 5L, ASTM D2513): Unknown? 3c. Pipe manufacturer: Unknown? 3d. Year of manufacture: Unknown? 4. Material involved in Incident: - If Other, specify: 4a. If Steel, Specify seam type: Vone/Unknown? 4b. If Steel, Specify wall thickness (inches): Unknown? 4c. If Piastic, Specify Standard Dimension Ratio (SDR): - If Other, describe: 4d. If Piastic, Specify Standard Dimension Ratio (SDR): - If Other, describe: - If Polyethylene (PE) is selected as the type of plastic in Part C, Qu - Specify PE Pipe Material Designation Code (i.e. 2406, 3408, etc.)	Outside Meter/Regulator set
2. Part of system involved in Incident: - If Other, specify 2a. Year "Part of system involved in Incident" was installed: Unknown? 3. When "Main" or "Service" is selected as the "Part of system involved in Incid 3a. Nominal diameter of pipe (in): 3b. Pipe specification (e.g., API 5L, ASTM D2513): Unknown? 3c. Pipe manufacturer: Unknown? 3d. Year of manufacture: Unknown? 4. Material involved in Incident: - If Other, specify: 4a. If Steel, Specify searn type: None/Unknown? 4b. If Steel, Specify wall thickness (inches): Unknown? 4c. If Piastic, Specify type: - If Other, describe: 4d. If Piastic, Specify Standard Dimension Ratio (SDR): Or wall thickness: Unknown? 4e. If Polyethylene (PE) is selected as the type of plastic in Part C, Qi - Specify PE Pipe Material Designation Code (i.e. 2406, 3408, etc.) Unknown?	Outside Meter/Regulator set
2. Part of system involved in Incident: - If Other, specify. 2a. Year "Part of system involved in Incident" was installed: Unknown? 3. When "Main" or "Service" is selected as the "Part of system involved in Incid 3a. Nominal diameter of pipe (in): 3b. Pipe specification (e.g., API 5L, ASTM D2513): Unknown? 3c. Pipe manufacturer: Unknown? 3d. Year of manufacture: Unknown? 4. Material involved in Incident: - If Other, specify: 4a. If Steel, Specify seam type: - If Other, specify: 4b. If Steel, Specify wall thickness (inches): Unknown? 4c. If Piastic, Specify type: - If Other, describe: 4d. If Piastic, Specify Standard Dimension Ratio (SDR): - If Other, describe: - If Other, describe: - If Other, describe: - Unknown? 4e. If Polyethylene (PE) is selected as the type of plastic in Part C, Q - Specify PE Pipe Material Designation Code (i.e. 2406, 3408, etc.) - Type of release involved : - If Mechanical Puncture - Specify Approx size: - If Mechanical Puncture - Specify Approx size: - If Approx. size: in, (axial):	Outside Meter/Regulator set
2. Part of system involved in Incident: - If Other, specify. 2a. Year "Part of system involved in Incident" was installed: Unknown? 3. When "Main" or "Service" is selected as the "Part of system involved in Incident 3a. Nominal diameter of pipe (in): 3b. Pipe specification (e.g., API 5L, ASTM D2513): Unknown? 3c. Pipe manufacturer: Unknown? 3d. Year of manufacture: Unknown? 4. Material invoived in Incident: - If Other, specify: 4a. If Steel, Specify searn type: - If Other, specify: 4b. If Steel, Specify wall thickness (inches): Unknown? 4c. If Piastic, Specify type: - If Other, describe: 4d. If Piastic, Specify Standard Dimension Ratio (SDR): - If Other, describe: Unknown? 4e. If Polyethylene (PE) is selected as the type of plastic in Part C, Qi - Specify PE Pipe Material Designation Code (i.e. 2406, 3408, etc.) Unknown? 5. Type of release involved : - If Mechanical Puncture - Specify Approx size:	Outside Meter/Regulator set

Page 2 of 10

- If Other, Describe: - If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: (widest opening):	
(length circumferentially or axially):	
- If Other - Describe:	Gas meter was damaged during the fire/explosion which melter the dial face of the meter causing an unintentilonal release of gas.
PART D - ADDITIONAL CONSEQUENCE INFORMATION	
1. Class Location of Incident :	Class 4 Location
2. Estimated Property Damage :	
2a. Estimated cost of public and non-Operator private property damage	\$ 89,200
2b. Estimated cost of Operator's property damage & repairs	\$ 45
2c. Estimated cost of Operator's emergency response     2d. Estimated other costs	\$ 1,500 \$ 0
- Describe:	
2e. Total estimated property damage (sum of above)	\$ 90,745
	( <u> </u>
Cost of Gas Released	
2f. Estimated cost of gas released     S. Estimated number of customers out of service:	\$ 142
3a. Commercial entities	0
3b. Industrial entities	
3c. Residences	1
PART E - ADDITIONAL OPERATING INFORMATION	
1. Estimated pressure at the point and time of the Incident (psig):	16.80
<ol><li>Normal operating pressure at the point and time of the incident (psig):</li></ol>	19.00
<ol> <li>Maximum Allowable Operating Pressure (MAOP) at the point and time of</li> </ol>	35.00
the incident (psig):	
4. Describe the pressure on the system relating to the Incident:	Pressure did not exceed MAOP
5. Was a Supervisory Control and Data Acquisition (SCADA) based system in place on the pipeline or facility involved in the Incident?	Yes
- If Yes:	
5a. Was it operating at the time of the Incident?	Yes
5b. Was it fully functional at the time of the Incident?	Yes
5c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume or pack calculations) assist with the detection of the Incident?	No
5d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the incident?	Νο
5. How was the Incident Initially identified for the Operator?	Notification from Emergency Responder
6a. If "Controller", "Local Operating Personnel, including	
contractors", "Air Patrol", or "Ground Patrol by Operator or its	
contractor" is selected in Question 6, specify the following: - If Other, Specify:	
7. Was an investigation initiated into whether or not the controller(s) or control oom issues were the cause of or a contributing factor to the Incident?	No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)
<ul> <li>If No, the operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an</li> </ul>	Duke-Energy detemined that the actions of the controller(s) and the control room systems did not influence the incident.
explanation for why the operator did not investigate)	
- If Yes, Specify investigation result(s) (select all that apply):	
<ul> <li>Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue</li> </ul>	
<ul> <li>Investigation did NOT review work schedule rotations, continuous</li> </ul>	
<ul> <li>Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors</li> </ul>	
associated with fatigue	
- Provide an explanation for why not:     - Investigation identified no control room issues	
Investigation identified no controller issues	

Page 3 of 10

<ul> <li>Investigation identified that fatigue may have affected the</li> </ul>	
controller(s) involved or impacted the involved controller(s) response	
<ul> <li>Investigation identified incorrect procedures</li> </ul>	
<ul> <li>Investigation identified incorrect control room equipment operation</li> </ul>	
<ul> <li>Investigation identified maintenance activities that affected control</li> </ul>	
room operations, procedures, and/or controller response	
<ul> <li>Investigation identified areas other than those above Describe:</li> </ul>	
PART F - DRUG & ALCOHOL TESTING INFORMATION	
<ol> <li>As a result of this Incident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug &amp; Alcohol Testing regulations?</li> </ol>	Yes
- If Yes:	
1a. Specify how many were tested:	1
1b. Specify how many failed:	0
<ol> <li>As a result of this Incident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug &amp; Alcohol Testing regulations?</li> <li>If Yes:</li> </ol>	No
2a. Specify how many were tested:	
2b. Specify how many falled:	
PART G - CAUSE INFORMATION	
Select only one box from PART G in shaded column on left representing the App right. Describe secondary, contributing, or root causes of the incident in the narra	arent Cause of the Incident, and answer the questions on the tive (PART H).
Apparent Cause:	G8 - Other Incident Cause
G1 - Corrosion Failure - only one sub-cause can be picked from shaded lef	t-hand column
Corrosion Fallure Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Specify:	
- If Other, Specify: 2. Type of corrosion:	
- If Other, Specify: 2. Type of corrosion: - Galvanic	5
- If Other, Specify: 2. Type of corrosion: - Galvanic - Atmospheric	
- If Other, Specify: 2. Type of corrosion: - Galvanic - Atmospheric - Stray Current	
- If Other, Specify: 2. Type of corrosion: - Galvanic - Atmospheric - Stray Current - Microbiological	
- If Other, Specify: - Galvanic - Atmospheric - Stray Current - Microbiological - Selective Seam	
- If Other, Specify: - Galvanic - Atmospheric - Stray Current - Microbiological - Selective Seam - Other	
- If Other, Specify: - Galvanic - Atmospheric - Stray Current - Microbiological - Selective Seam - Other - If Other, Describe:	
- If Other, Specify: 2. Type of corrosion: - Galvanic - Atmospheric - Stray Current - Microbiological - Selective Seam - Other - If Other, Describe: 3. The type(s) of corrosion selected in Question 2 Is based on the following:	
If Other, Specify: <ul> <li>Type of corrosion:</li></ul>	
If Other, Specify:         - If Other, Specify:         - Galvanic         - Atmospheric         - Stray Current         - Microbiological         - Selective Seam         - Other         - Other         - If Other, Describe:         - The type(s) of corrosion selected in Question 2 Is based on the following:         - Field examination         - Determined by metallurgical analysis	
- If Other, Specify:     - Galvanic     - Galvanic     - Atmospheric     - Stray Current     - Microbiological     - Selective Seam     - Other     - If Other, Describe: 3. The type(s) of corrosion selected in Question 2 ls based on the following:     - Field examination     - Determined by metallurgical analysis     - Other	
- If Other, Specify: 2. Type of corrosion: - Galvanic - Atmospheric - Stray Current - Microbiological - Selective Seam - Other - If Other, Describe: 3. The type(s) of corrosion selected in Question 2 is based on the following: - Field examination - Determined by metailurgical analysis - Other - If Other, Describe:	
- If Other, Specify:     - Galvanic     - Galvanic     - Atmospheric     - Stray Current     - Microbiological     - Selective Seam     - Other     - If Other, Describe: 3. The type(s) of corrosion selected in Question 2 ls based on the following:     - Field examination     - Determined by metallurgical analysis     - Other	
- If Other, Specify:     - Galvanic     - Galvanic     - Atmospheric     - Stray Current     - Microbiological     - Selective Seam     - Other     - If Other, Describe:     The type(s) of corrosion selected in Question 2 is based on the following:	
- If Other, Specify:     - Specify:     - Galvanic     - Atmospheric     - Stray Current     - Microbiological     - Selective Seam     - Other     - If Other, Describe:     The type(s) of corrosion selected in Question 2 is based on the following:	
- If Other, Specify:     - Galvanic     - Galvanic     - Atmospheric     - Stray Current     - Microbiological     - Selective Seam     - Other     - If Other, Describe:     The type(s) of corrosion selected in Question 2 is based on the following:	
If Other, Specify:         - If Other, Specify:         - Galvanic         - Atmospheric         - Stray Current         - Microbiological         - Selective Seam         - Other         - If Other, Describe:         - The type(s) of corrosion selected in Question 2 Is based on the following:         - Fleld examination         - Determined by metallurgical analysis         - Other         - If Other, Describe:         - Uther         - If Other, Describe:         - If Other, Describe:         - Other         - If Other, Describe:         - If Other, Describe:         - Other         - If Yes:         - If Yes:         - If Yes, Year protection started:         - Use one or more Cathodic Protection Survey been conducted at         the point of the incident?         - Year protection Survey been conducted at         the point of the incident?         - Year Protection Survey been conducted at         the point of the incident?         - Year Protection Survey been conducted at         - Year Protection Survey been con	
- If Other, Specify:     - Galvanic     - Galvanic     - Atmospheric     - Stray Current     - Microbiological     - Selective Seam     - Other     - If Other, Describe:     - The type(s) of corrosion selected in Question 2 is based on the following:         - Field examination         - Determined by metallurgical analysis         - Other         - If Other, Describe:     . Was the failed item buried under the ground?     - If Other, Describe:     . Atmospheric     - If Yes:     4a, Was failed item considered to be under cathodic protection at the time of the incident?         - If Yes, Year protection started:         - Uf Yes, Year protection started:         - If Yes, Year protection started:         - If Yes, Atta one or more Cathodic Protection Survey been conducted at the point of the incident?         - If Yes, CP Annual Survey" – Most recent year conducted:	
- If Other, Specify:     - Galvanic     - Galvanic     - Atmospheric     - Stray Current     - Microbiological     - Selective Seam     - Other     - If Other, Describe:     - The type(s) of corrosion selected in Question 2 is based on the following:	
- If Other, Specify:     - Galvanic     - Galvanic     - Atmospheric     - Stray Current     - Microbiological     - Selective Seam     - Other     - If Other, Describe:     - The type(s) of corrosion selected in Question 2 ls based on the following:         - Field examination         - Determined by metallurgical analysis         - Other         - If Other, Describe:     4. Was the failed item buried under the ground?     - If Other, Describe:     4. Was failed item considered to be under cathodic protection at the     time of the incident?         - If Yes;         - If Yes, Year protection started:         - Uf Yes, Year protection started:         - Uf As one or more Cathodic Protection Survey been conducted at         the point of the incident?         If "Yes, CDe Annual Survey" – Most recent year conducted:         If "Yes, Other CP Survey" – Most recent year conducted:         If "Yes, Other CP Survey" – Most recent year conducted:         If "Yes, Other CP Survey" – Most recent year conducted:	
- If Other, Specify:     - Selevanic     - Atmospheric     - Stray Current     - Microbiological     - Selective Seam     - Other     - Other     - If Other, Describe:     - The type(s) of corrosion selected in Question 2 is based on the following:	
<ul> <li>If Other, Specify:</li> <li>2. Type of corrosion: <ul> <li>Galvanic</li> <li>Atmospheric</li> <li>Stray Current</li> <li>Microbiological</li> <li>Selective Seam</li> <li>Other</li> <li>If Other, Describe:</li> </ul> </li> <li>3. The type(s) of corrosion selected in Question 2 is based on the following: <ul> <li>Field examination</li> <li>Determined by metailurgical analysis</li> <li>Other</li> <li>If Other, Describe:</li> </ul> </li> <li>4. Was the failed item buried under the ground? <ul> <li>If Other, Describe:</li> </ul> </li> <li>4. Was failed item considered to be under cathodic protection at the time of the incident? <ul> <li>If Yes;</li> <li>4a, Was failed item considered to be under cathodic protection at the time of the incident?</li> <li>If Yes, Year protection started:</li> <li>4b. Was shielding, tenting, or disbonding of coating evident at the point of the incident?</li> <li>If "Yes, CP Annual Survey" – Most recent year conducted:</li> <li>If "Yes, Other CP Survey" – Most recent year conducted:</li> <li>If "Yes, Other CP Survey" – Most recent year conducted:</li> <li>If "Yes, Other CP Survey" – Most recent year conducted:</li> <li>If "Yes, Other CP Survey" – Most recent year conducted:</li> <li>If No: <ul> <li>4d. Was the failed item externally coated or painted?</li> </ul> </li> </ul> </li> </ul>	
<ul> <li>If Other, Specify:</li> <li>2. Type of corrosion: <ul> <li>Galvanic</li> <li>Atmospheric</li> <li>Stray Current</li> <li>Microbiological</li> <li>Selective Seam</li> <li>Other</li> <li>If Other, Describe:</li> </ul> </li> <li>3. The type(s) of corrosion selected in Question 2 is based on the following: <ul> <li>Field examination</li> <li>Determined by metallurgical analysis</li> <li>Other</li> <li>If Other, Describe:</li> </ul> </li> <li>4. Was the failed item buried under the ground? <ul> <li>If Other, Describe:</li> </ul> </li> <li>4. Was the failed item considered to be under cathodic protection at the time of the incident? <ul> <li>If Yes;</li> <li>4a, Was failed item considered to be under cathodic protection at the time of the incident?</li> <li>If Yes, Year protection started:</li> <li>4b. Was shielding, tenting, or disbonding of coating evident at the point of the incident?</li> <li>If Yes, CP Annual Survey" – Most recent year conducted: If "Yes, Other CP Survey" – Most recent year conducted: If "Yes, Other CP Survey" – Most recent year conducted: If "Yes, Other CP Survey" – Most recent year conducted: If "Yes, Other CP Survey" – Most recent year conducted:</li> <li>If "Yes, Other CP Survey" – Most recent year conducted: If "Yes, Other CP Survey" – Most recent year conducted: If "Yes, Other CP Survey" – Most recent year conducted: If "Yes, Other CP Survey" – Most recent year conducted: If "Yes, Other CP Survey" – Most recent year conducted: If "Yes, Other CP Survey" – Most recent year conducted: If "Yes, Other CP Survey" – Most recent year conducted: If "Yes, Other CP Survey" – Most recent year conducted: Survey</li> </ul></li></ul>	
<ul> <li>If Other, Specify:</li> <li>2. Type of corrosion: <ul> <li>Galvanic</li> <li>Atmospheric</li> <li>Stray Current</li> <li>Microbiological</li> <li>Selective Seam</li> <li>Other</li> <li>If Other, Describe:</li> </ul> </li> <li>3. The type(s) of corrosion selected in Question 2 is based on the following: <ul> <li>Field examination</li> <li>Determined by metailurgical analysis</li> <li>Other</li> <li>If Other, Describe:</li> </ul> </li> <li>4. Was the failed item buried under the ground? <ul> <li>If Other, Describe:</li> </ul> </li> <li>4. Was failed item considered to be under cathodic protection at the time of the incident? <ul> <li>If Yes;</li> <li>4a, Was failed item considered to be under cathodic protection at the time of the incident?</li> <li>If Yes, Year protection started:</li> <li>4b. Was shielding, tenting, or disbonding of coating evident at the point of the incident?</li> <li>If "Yes, CP Annual Survey" – Most recent year conducted:</li> <li>If "Yes, Other CP Survey" – Most recent year conducted:</li> <li>If "Yes, Other CP Survey" – Most recent year conducted:</li> <li>If "Yes, Other CP Survey" – Most recent year conducted:</li> <li>If "Yes, Other CP Survey" – Most recent year conducted:</li> <li>If No: <ul> <li>4d. Was the failed item externally coated or painted?</li> </ul> </li> </ul> </li> </ul>	

Page 4 of 10

7. Results of visual examination:	
- If Other, Describe:	
8. Cause of corrosion (select all that apply):	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological - Erosion	
- Closion - Other	
- If Other, Specify:	
9. The cause(s) of corrosion selected in Question 8 is based on the following: (se	elect all that apply):
- Field examination	
- Determined by metallurgical analysis	
- Other	
- if Other, Describe:	
10. Location of corrosion (select all that apply):	
- Low point in pipe - Elbow	
- Drop-out	
- Other	
- If Other, Describe:	
11. Was the gas/fluid treated with corrosion inhibitor or biocides?	
<ol> <li>Were any liquids found in the distribution system where the incident occurred?</li> </ol>	
Complete the following if any Corrosion Failure sub-cause is selected AND th Question 2) is Main, Service, or Service Riser.	e "Part of system involved in incident" (from PART C,
13. Date of the most recent Leak Survey conducted	
14. Has one or more pressure test been conducted since original construction	
at the point of the Incident?	
- If Yes:	
Most recent year tested:	
Test pressure:	
G2 - Natural Force Damage - only one sub-cause can be picked from sha	ded left-handed column
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	
- If Other, Specify:	
- if Heavy Rains/Floods:	
2. Specify:	
- If Other, Specify:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Specify:	
- If High Winds:	
- Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Incident generated in conjunction with	
an extreme weather event?	
6.a If Yes, specify (select all that apply):	
- Hurricane	
- Tropical Storm	
- Tomado	
- Other	
- If Other, Specify:	
G3 - Excavation Damage - only one sub-cause can be picked from shaded	l left-hand column
Excavation Damage – Sub-Cause:	
<ul> <li>If Excavation Damage by Operator (First Party):</li> </ul>	
- If Evenuation Demography Operation - Construction / Construction	
<ul> <li>If Excavation Damage by Operator's Contractor (Second Party):</li> </ul>	

Page 5 of 10

- If Excavation Damage by Third Party:		
- If Previous Damage due to Excavation Activity:		
In terrors saminge day to Excertation Activity.		
Complete the following ONLY IF the "Part of system involved in incident" (fro	m Part C. Question 2) is Main. Service. or Service Riser.	
1. Date of the most recent Leak Survey conducted		
2. Has one or more pressure test been conducted since original construction		
at the point of the Incident?		
- If Yes:		
Most recent year tested:		
Test pressure:		
	A	
Complete the following if Excavation Damage by Third Party is selected.		
3. Dld the operator get prior notification of the excavation activity?	r	
3a, If Yes, Notification received from: (select all that apply):		
- One-Call System		
- Excavator		
- Contractor		
- Landowner		
Complete the following mandatory CGA-DIRT Program questions if any Exca	vation Damage sub-cause is selected.	
4. Do you want PHMSA to upload the following information to CGA-DIRT (		
www.cga-dirt.com)?		
5. Right-of-Way where event occurred (select all that apply):		
- Public		
- If Public, Specify:		
- Private		
- If Private, Specify:		
- Pipeline Property/Easement		
- Power/Transmission Line		
- Railroad		
- Dedicated Public Utility Easement		
- Federal Land		
- Data not collected		
- Unknown/Olher		
6. Type of excavator :		
7. Type of excavation equipment :		
8. Type of work performed :		
9. Was the One-Call Center notified?		
9a. If Yes, specify ticket number:		
9b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified;		
10. Type of Locator:		
11. Were facility locate marks visible in the area of excavation?		
12. Were facilities marked correctly? 13. Did the damage cause an interruption in service?		
13a. If Yes, specify duration of the interruption:		
14. Description of the CGA-DIRT Root Cause (select only the one predominant f	First Jours CCA DIPT Poot Cause and then where available as a	
choice, the one predominant second level CGA-DIRT Root Cause as well):	ist aver COA-Driver Noor Cause and then, where available as a	
Root Cause Description:	ſ	
- Root Cause Description:     - If One-Call Notification Practices Not Sufficient, specify:		
If Locating Practices Not Sufficient, specify:		
<ul> <li>If Excavallon Practices Not Sufficient, specify:</li> <li>If Excavallon Practices Not Sufficient, specify:</li> </ul>		
- If Other/None of the Above (explain), specify:		
- il Outernone of the Above (explain), speony.		
G4 - Other Outside Force Damage - only one sub-cause can be selected from the shaded left-hand column		
Other Outside Force Damage – Sub-Cause:		
<ul> <li>If Nearby Industrial, Man-made, or Other Fire/Explosion as Primary Cause</li> </ul>	of incident:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:		
1. Vehicle/Equipment operated by:		
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment o	Vessels Set Adrift or Which Have Otherwise Lost Their	
- If Damage by Boats, barges, Driving Rigs, or Other Maritime Equipment o	r vessels der muttit of mitten fidve Otherwise Lust fillen	
2. Select one or more of the following IF an extreme weather event was a factor:		

Page 6 of 10

- Hurricane		
- Tropical Storm		
- Tornado		
- Heavy Rains/Flood		
- Other		
- If Other, Specify:		
<ul> <li>If Routine or Normal Fishing or Other Maritime Activity NOT Engaged in Excavation:</li> </ul>		
If Electrical Arcing from Other Equipment or Facility:		
- If Previous Mechanical Damage NOT Related to Excavation:		
Complete the following ONLY IF the "Part of system involved in Incident" (from Part	O Overstien Ol in Main Consider on Consider Direct	
	C, Question 2) is Main, Service, or Service Riser.	
3. Date of the most recent Leak Survey conducted:		
4. Has one or more pressure test been conducted since original construction		
at the point of the Incident?		
- If Yes:		
Most recent year tested:		
Test pressure (psig):		
	<u> </u>	
- If Intentional Damage:		
5. Specify:		
- If Other, Specify:		
- If Other Outside Force Damage:	<u></u>	
6. Describe:	r	
6. Ueschbe:		
G5 - Material Failure of Pipe or Weld - only one sub-cause can be selected	d from the shaded left-hand column	
Material Fallure of Pipe or Weld Sub-Cause:		
- If Body of Pipe:		
	n	
1. Specify:		
- If Other, Describe:		
- If Butt Weld:		
2. Specify:		
- If Other, Describe:		
- If Fillet Weld:	1	
3. Specify:		
- If Other, Describe:		
- If Pipe Seam:		
4. Specify:		
- If Other, Describe:		
- If Threaded Metallic Pipe:		
- If Mechanical Fitting:		
5. Specify the mechanical fitting involved:		
- If Other, Describe:		
6. Specify the type of mechanical fitting:		
- if Other, Describe:		
7. Manufacturer:		
8. Year manufactured:		
9. Year Installed:		
10. Other attributes:		
11. Specify the two materials being joined:	I	
	)	
11a. First material being jointed: - Steel		
- Cast/Wrought Iron		
- Ductile Iron		
- Copper		
- Plastic		
- Unknown		
- Other		
- If Other, Specify:		
11b. If Plastic, specify:	······································	
- if Other Plastic, specify:		
11c. Second material being joined:		
- Steel		

Page 7 of 10

- Cast/Wrought Iron	
- Ductile Iron	
- Соррег	
- Plastic	
- Unknown	
- Other	
- If Other, Specify:	
11d. If Plastic, specify:	
- If Other Plastic, Specify:	
12. If used on plastic pipe, did the fitting - as designed by the manufacturer -	
Include restraint?	
12a. If Yes, specify:	
- If Compression Fitting:	<u> </u>
13. Fitting type: 14. Manufacturer:	
14. Manufacturer: 15. Year manufactured:	
16. Year installed:	
17. Other attributes:	
	1
18. Specify the two materials being joined:	
18a. First material being joined: - Steel	I
- Cast/Wrought Iron - Ductile Iron	
- Copper	
- Plastic	
- Unknown	
- Other	
- If Other, specify:	
18b. If Plastic, specify:	
- If Other Plastic, specify:	
18c. Second material being joined:	
- Steel	
- CastWrought Iron	
- Ductile Iron	
- Copper	
- Plastic	
- Unknown	
- Other	
If Other, specify:	
18d. If Plastic, specify:	
- Other Plastic, specify:	
- If Fusion Joint:	
19. Specify:	
- If Other, Specify:	
20. Year installed:	
21. Other attributes:	
22. Specify the two materials being joined:	
22a. First material being joined:	
- if Other, Specify:	
22b. Second material being joined:	
- if Other, Specify:	
- if Other Pipe, Weld, or Joint Failure:	
23. Describe:	
23. Describe: Complete the following if any Pipe, Weld, or Joint Failure sub-cause is selec	L
	164,
24. Additional Factors (select all that apply):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Bum	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other	
wuise)	

Page 8 of 10

25. Was the incident a result of:	
- Construction defect	
Specify:	
- Material defect	
Specify:	
- If Other, Specify:	· · · · · · · · · · · · · · · · · · ·
- Design defect	
- Previous damage	
26. Has one or more pressure test been conducted since original construction	
at the point of the Incident?	
- If Yes:	
Most recent year tested:	
Test pressure:	
G6 - Equipment Failure - only one sub-cause can be selected from the sha	ded left-hand column
Equipment Fallure – Sub-Cause:	
- If Malfunction of Control/Relief Equipment:	
1. Specify:	<u> </u>
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- Pressure Regulator	
- Other	
- If Other, Specify:	
- If Threaded Connection Failure:	
2. Specify:	1
- If Other, Specify:	
- If Non-threaded Connection Failure:	
3. Specify:	T
- If Other, Specify:	
- If Valve:	
4. Specify:	
- If Other, Specify:	
4a. Valve type:	
4b. Manufactured by:	
4c. Year manufactured:	
- If Other Equipment Fallure:	
5. Describe:	
G7 - Incorrect Operation - only one sub-cause can be selected from the sh	aded left-hand column
Incorrect Operation Sub-Cause:	
- If Damage by Operator or Operator's Contractor NOT Related to Excavation	n and NOT due to Motorized Vehicle/Equipment Damage:
- If Valve Left or Placed in Wrong Position, but NOT Resulting In an Overpr	essure:
- If Pipeline or Equipment Overpressured:	
- If Equipment Not Installed Properly:	
- If Wrong Equipment Specified or installed:	
- If "Other incorrect Operation:	
1. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
2. Was this incident related to: (select all that apply)	
- Inadequate procedure	[
- No procedure established	
- Failure to follow procedure	
. winter a tribut prevenue	1

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Page 9 of 10

- If Other, Describ	
- II Otter, Descrip	e:
<ol><li>What category type was the activity that caused the Incident:</li></ol>	
4. Was the task(s) that led to the Incident identified as a covered task in your Operator Qualification Program?	
4a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	
G8 - Other Incident Cause - only one sub-cause can be selected from It	ne shaded left-hand column
Other Incident Cause – Sub-Cause:	Unknown
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	Investigation complete, cause of Incident unknown
PART H - NARRATIVE DESCRIPTION OF THE INCIDENT	
determined that there are several possible causes including but not li	rvice line and the houseline. Duke Energy Kentucky has mited to a leaking coupling on the riser before the meter and
	mited to a leaking coupling on the riser before the meter and scheduled by SEA. The cause could have been an Act of
determined that there are several possible causes including but not li several leaking unions in the houseline. The cause of this incident may remain unknown. No further testing is God.	mited to a leaking coupling on the riser before the meter and scheduled by SEA. The cause could have been an Act of
determined that there are several possible causes including but not li several leaking unions in the houseline. The cause of this incident may remain unknown. No further testing is God. File Full Name Note: The users have to sign in to view the attachment if the PART I - PREPARER AND AUTHORIZED SIGNATURE	mited to a leaking coupling on the riser before the meter and scheduled by SEA. The cause could have been an Act of here is no current user session.
determined that there are several possible causes including but not li several leaking unions in the houseline. The cause of this incident may remain unknown. No further testing is God. File Full Name Note: The users have to sign in to view the attachment if the	mited to a leaking coupling on the riser before the meter and scheduled by SEA. The cause could have been an Act of
determined that there are several possible causes including but not liseveral leaking unions in the houseline.         The cause of this incident may remain unknown. No further testing is God.         File Full Name Note: The users have to sign in to view the attachment if the several sign in to view the attachment if the several sign in the several sign in the several sign in the several sign in the several	mited to a leaking coupling on the riser before the meter and scheduled by SEA. The cause could have been an Act of here is no current user session.
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Page 10 of 10

Attachment I

**Duke Energy Final Incident Report** 

Mr. Joel Grugin Inspector, Gas Pipeline Safety Branch Kentucky Public Service Commission 211 Sower Boulevard Frankfort, Kentucky 40602

Mr. Grugin:

#### Re: 1615 Water Works Road Newport, Kentucky in Campbell County Fire/Explosion with a Fatality

This letter is to update your files regarding the incident that occurred on January 25, 2013 at 1615 Water Works Road. This incident met the reporting requirements under Title 807 KAR 5:027, Sections 3 and 4 and the PHMSA reporting requirements found in 49 CFR Part 191. This incident was a fire/explosion which resulted in a fatality.

Duke Energy Kentucky has cooperated with all outside authorities into the cause of this incident. Duke Energy Kentucky's investigation has determined that the cause of this incident is unknown.

Duke Energy Kentucky is not aware of any further testing by Scientific Expert Analysis (SEA). If Duke Energy Kentucky becomes aware of any new information related to this incident, Duke Energy Kentucky will report this information according to the reporting requirements.

SEA is the expert retained by Met Life, the homeowners insurance carrier. At this time, Met Life is not required to disclose any expert reports to Duke Energy Kentucky. Also, as you know, the riser and coupling were subjected to CT scanning. Met Life's expert, Dr. Elizabeth Buc, oversaw the CT scanning. Similarly, Met Life is not required to disclose any report by Dr. Buc at this time. If a lawsuit is filed, then Duke Energy Kentucky may be able to obtain a copy of any expert reports, but such disclosure of expert reports is subject to the Kentucky Rules of Civil Procedure.

Duke Energy Kentucky retained a 3rd party investigation company in accordance with 49 CFR 192.617 and Chapter 2 (8.2.2) of Duke Energy Kentucky's Plan for Emergencies and Natural Disasters. The Investigators were at the scene, witnessed testing that SEA has performed, and witnessed the CT scanning. They have not concluded a cause based on the information to date. All of the Customer owned piping and appliances are in the possession of SEA. When and if Duke Energy Kentucky is able to retain customer piping and the coupling, further testing will be conducted by Duke Energy Kentucky and its 3<sup>rd</sup> party investigator and will notify the KPSC and supplement the incident report.

Duke Energy Kentucky has reviewed the mechanical fitting failures in our Kentucky service territory (required by PHMSA) and have not found any evidence that the coupling on the riser contributed to the incident, and that it is nothing more than an isolated incident. The incident will be a part of the Duke Energy Kentucky's DIMP criteria that is reviewed annually. All DOT regulations that were required by Duke Energy Kentucky were followed and the documentation provided to Joel Grugin.

This correspondence completes the reporting requirements regarding this incident. If you have any questions, I can be reached at 859/815-6412.

Sincerely,

Jarome Numphrier

Jerome Humphries ' Regulatory Compliance Specialist Gas Operations/Regulatory Compliance/Duke Energy

Rocco D'Ascenzo Senior Counsel Duke Energy Kentucky, Inc. 139 East Fourth Street P. O. Box 960 Cincinnati, OH 45201